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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,241

12/16/2005

Philippe Alips

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EXAMINER

CLARK, MAYA ANGELICA

ART UNIT

PAPER NUMBER

4128

MAIL DATE

DELIVERY MODE

04/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,241	Applicant(s) ALIPS ET AL.	
	Examiner MAYA CLARK	Art Unit 4128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>22 April 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show a cradle as discussed on page 5, line 7 and a seat as discussed on page 6, line 25 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. **No new matter should be entered.**

Specification

1. The abstract of the disclosure is objected to because of the following informality: no drawing shall be placed on the abstract page. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 4-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-10 have not been further treated on the merits.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Hammeke reference (US 4724299), hereinafter Hammeke in view of Briand et al (US 7038163 B2), hereinafter Briand.

Hammeke discloses a method of pointing a fine fluid jet onto a zone or an object, especially in laser welding, machining or surfacing, said jet being emitted from a blowing nozzle (A), said nozzle having an ejection channel comprising a terminal portion (34), a light source (10) with emitted laser beam (102) placed on the axis of the ejection channel upstream of said nozzle (A) in the direction of flow of the flux of said fluid,

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coaxial with the ejection channel and propagating inside said channel in the flow direction of said fluid, in which, with the flow of said fluid being temporarily interrupted, by relative displacement of said object or said zone or said light beam, said light beam is pointed onto said object or said zone and said fine fluid jet is sent onto said zone or said object (see Hammeke-figure 1 and col.2, lines 62-68; col. 3, lines 1-34; and col. 5, lines 9-11).

The Hammeke reference is different in that it fails to disclose a method wherein the nozzle has a circular cross sectional diameter not exceeding 5mm.

Attention is directed to the Briand reference which discloses a nozzle having a diameter ranging from 3mm to 30mm (see Briand-col.3, line 16-17). This range in diameter enables the exiting fluid jet speed to vary.

It would have been obvious to have modified Hammeke to include the Briand reference because of its capability of controlling the nozzle diameter which in turn controls the speed of the fluid jet exiting the nozzle.

Furthermore, the Hammeke reference differs in that it fails to disclose a monochromatic or polychromatic nondivergent light beam with at least one wavelength in the range of 400 to 760 nanometers.

It would have been an obvious matter of design choice to a person of ordinary skill in the art to have the nondivergent light beam in a range between 400 to 760 nanometers because discovering a workable nondivergent light beam range would have been a mere design consideration based on the type of laser source being used. Such a modification would have involved only routine skill in the art to accommodate the

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nondivergent light beam requirement. It is noted that discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1995)).

Regarding claim 2, Hammeke discloses a method characterized in that the fluid is a gas (see Hammeke-col.4, lines 58-60).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Hammeke reference.

The modified Hammeke reference differs in that it fails to disclose a method characterized in that the fluid contains fine particles.

Claim 3 can be interpreted to depend on claim 1 in which the fluid is generic and not a gas as disclosed in claim 2. As a result, air can be considered a fluid. Therefore, it is well known to one of ordinary skill in the art that air i.e. dust has a makeup partially consisting of fine particles. It would have been an obvious matter of design choice to one of ordinary skill in the art to modify the modified Hammeke reference to include a generic fluid made up of fine particles since the applicant has not disclosed that having a generic fluid with fine particles solves any stated problem or is for any particular purpose, and it appears that the modified Hammeke method can work with the use of a generic fluid made up of fine particles.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAYA CLARK whose telephone number is (571)270-5605. The examiner can normally be reached on Monday through Friday, 10 am to 6:00 pm (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoa Huynh can be reached on (571)272-4888. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MC
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/Khoa D. Huynh/
Supervisory Patent Examiner, Art Unit 4128